

10/009,219 SEARCH STRATEGY

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(FILE 'HOME' ENTERED AT 13:48:57 ON 17 DEC 2003)

FILE 'CAPLUS' ENTERED AT 13:49:02 ON 17 DEC 2003

E DEWOLF W/AU 25

L1 15 S (E5 OR E6 OR E7 OR E8 OR E9 OR E10) AND (FABI OR (FAB (W) I)
L2 0 S L1 AND UNCOMPETITIVE

FILE 'MEDLINE, AGRICOLA, CAPLUS, BIOSIS, EMBASE, WPIDS' ENTERED AT
13:54:43 ON 17 DEC 2003

L3 506 S (FABI OR (FAB (W) I) OR (ENOYL-ACP (W) REDUCTASE) OR (ACYL-AC
L4 9 S L3 AND UNCOMPETITIVE
L5 3 DUP REM L4 (6 DUPLICATES REMOVED)

=>

	Type	L #	Hits	Search Text	DBs	Time Stamp
1	BRS	L1	271	fabI or (fab adj i) or (enoyl-ACP adj reductase) or (acyl-ACP adj dehydrogenase) or envm	USPAT; US-PGP UB; EPO; JPO; DERWE	2003/12/17 13:41
2	BRS	L2	186	I1 and (antagonist or inhibit\$)	USPAT; US-PGP UB; EPO; JPO; DERWE	2003/12/17 13:47
3	BRS	L3	29	I2 and (smithkline.as. or dewolf.in.)	USPAT; US-PGP UB; EPO; JPO; DERWE	2003/12/17 13:46
4	BRS	L4	1	I3 and (uncompetitive adj inhibit\$)	USPAT; US-PGP UB; EPO; JPO; DERWE	2003/12/17 13:45
5	BRS	L5	2	I3 and apo-acp	USPAT; US-PGP UB; EPO; JPO; DERWE	2003/12/17 13:46
6	BRS	L6	1	I2 and (uncompetitive near5 apo-acp)	USPAT; US-PGP UB; EPO; JPO; DERWE	2003/12/17 13:47

IUBMB Enzyme Nomenclature

EC 1.3.1.9

Common name: enoyl-[acyl-carrier-protein] reductase (NADH)

Reaction: acyl-[acyl-carrier protein] + NAD⁺ = *trans*-2,3-dehydroacyl-[acyl-carrier protein] + NADH + H⁺

Other name(s): enoyl-[acyl carrier protein] reductase; enoyl-ACP reductase; NADH-enoyl acyl carrier protein reductase; NADH-specific enoyl-ACP reductase; enoyl-[acyl-carrier-protein] reductase (NADH₂)

Systematic name: acyl-[acyl-carrier-protein]:NAD⁺ oxidoreductase

Comments: Catalyses the reduction of enoyl-acyl-[acyl-carrier protein] derivatives of carbon chain length from 4 to 16.

Links to other databases: [BRENDA](#), [EXPASY](#), [KEGG](#), [WIT](#), CAS registry number: 37251-08-4

References:

1. Shimakata, T. and Stumpf, P.K. Purification and characterizations of β-ketoacyl-[acyl-carrier-protein] reductase, β-hydroxyacyl-[acylcarrier-protein] dehydrase, and enoyl-[acyl-carrier-protein] reductase from *Spinacia oleracea* leaves. *Arch. Biochem. Biophys.* 218 (1982) 77-91. [Medline UI: [83073465](#)]
2. Weeks, G. and Wakil, S.J. Studies on the mechanism of fatty acid synthesis. 18. Preparation and general properties of the enoyl acyl carrier protein reductases from *Escherichia coli*. *J. Biol. Chem.* 243 (1968) 1180-1189. [Medline UI: [68198187](#)]

[EC 1.3.1.9 created 1972]

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IUBMB Enzyme Nomenclature

EC 1.3.1.10

Common name: enoyl-[acyl-carrier-protein] reductase (NADPH, B-specific)

Reaction: acyl-[acyl-carrier protein] + NADP⁺ = *trans*-2,3-dehydroacyl-[acyl-carrier protein] + NADPH + H⁺

Other name(s): acyl-ACP dehydrogenase; reductase, enoyl-[acyl carrier protein] (reduced nicotinamide adenine dinucleotide phosphate); NADPH 2-enoyl Co A reductase; enoyl acyl-carrier-protein reductase; enoyl-ACP reductase; enoyl-[acyl-carrier-protein] reductase (NADPH₂, B-specific)

Systematic name: acyl-[acyl-carrier-protein]:NADP⁺ oxidoreductase (B-specific)

Comments: Catalyses the reduction of enoyl-acyl-[acyl-carrier-protein] derivatives of carbon chain length from 4 to 16. The yeast and *Escherichia coli* enzymes are B-specific with respect to NADP⁺ (*cf.* EC 1.3.1.19 *cis*-1,2-dihydrobenzene-1,2-diol dehydrogenase).

Links to other databases: [BRENDA](#), [EXPASY](#), [KEGG](#), [WIT](#), CAS registry number: 37251-09-5

References:

1. Saito, K., Kawaguchi, A., Okuda, S., Seyama, Y. and Yamakawa, T. Incorporation of hydrogen atoms from deuterated water and stereospecifically deuterium-labeled nicotinamide nucleotides into fatty acids with the *Escherichia coli* fatty acid synthetase system. *Biochim. Biophys. Acta* 618 (1980) 202-213. [Medline UI: [80198471](#)]
2. Seyama, T., Kasama, T., Yamakawa, T., Kawaguchi, A., Saito, K. and Okuda, S. Origin of hydrogen atoms in the fatty acids synthesized with yeast fatty acid synthetase. *J. Biochem. (Tokyo)* 82 (1977) 1325-1329. [Medline UI: [78066799](#)]
3. Weeks, G. and Wakil, S.J. Studies on the mechanism of fatty acid synthesis. 18. Preparation and general properties of the enoyl acyl carrier protein reductases from *Escherichia coli*. *J. Biol. Chem.* 243 (1968) 1180-1189. [Medline UI: [68198187](#)]

[EC 1.3.1.10 created 1972, modified 1986]

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